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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,369	12/21/2001	Junji Kondou	M2047-37	5151

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EXAMINER	
AGHDAM, FRESHTEH N	
ART UNIT	**PAPER NUMBER**
2631	

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/032,369	KONDOU ET AL.	
	Examiner	Art Unit	
	Freshteh N. Aghdam	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments see page 2, lines 9-14, filed on 06/07/2005, with respect to the instant application's disclosed prior art and Razavilar (US 2003/0104831) have been fully considered and are persuasive. The rejection of claims 1-19 has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the instant application's disclosed prior art and Grubb et al (US 5,768,684).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9-14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the instant application's disclosed prior art, and further in view of Grubb et al (US 5,768,684).

As to claims 1, 11, 14, and 18, the instant application's disclosed prior art teaches a subband receiving apparatus comprising a plurality of subband filters 100 having different frequency bands for the received signal; a plurality of receiving quality detection means 102 responsive to the outputs of the subband filters 100; a receiving quality control means S23 based on the receiving quality information provided by the

plurality of quality detection means 102 wherein for each pass band filter there is a corresponding quality detection means 102 (Fig. 14; Pg. 2, Par. 1, 2, and 3). The instant application's disclosed prior art is silent about the first and second transmitting/receiving apparatuses, which mutually carry out transmission and reception; the receiving quality control means is a signal, which becomes a basis for controlling the level of the transmitted signal by the first transmitting/receiving apparatus, and the first transmitting/receiving apparatus adjusts the level of the signal to be transmitted based on the receiving quality control signal that has been transmitted by the second transmitting/receiving apparatus. Grubb, teaches first and second transmitting/receiving apparatuses (sender and receiver), which mutually carry out transmission and reception; a receiving quality control means which generates a control signal that becomes a basis for controlling the level of the transmitted signal by the first transmitting/receiving apparatus (i.e. sender), wherein the first transmitting/receiving apparatus adjusts the level of the signal to be transmitted based on the control signal transmitted from second transmitting/receiving apparatus (Col. 2, Lines 44-61; Col. 3, Lines 3-22). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Grubb with the instant application's disclosed prior art in order to control transmission power levels between a mobile unit and a node of a communication system (Col. 2, Lines 45 and 46).

As to claims 2 and 12,Grubb teaches that the receiving quality information is measuring received signal strength and error bit rate in the received signal (Col. 3, Lines 3-22; Col. 14, Lines 30-38). Therefore, it would have been obvious to one of

ordinary skill in the art to combine the teaching of Grubb with the instant application's disclosed prior art in order to control transmission power levels between a mobile unit and a node of a communication system (Col. 2, Lines 45 and 46).

As to claims 3 and 13, Grubb teaches receiving quality control means uses the receiving quality information as the receiving quality control signal to be transmitted to the first communication apparatus (i.e. feedback channel) see (Col. 2, Lines 50-62). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Grubb with the instant application's disclosed prior art in order to control transmission power levels between a mobile unit and a node of a communication system (Col. 2, Lines 45 and 46).

As to claims 4, 5, and 19, Grubb teaches the receiving quality control means includes a power control signal (i.e. LQI), which adjusts the electric energy level of the signal to be transmitted by the first transmitting/receiving apparatus to the second transmitting/receiving apparatus (Col. 3, Lines 15-23). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Grubb with the instant application's disclosed prior art in order to control transmission power levels between a mobile unit and a node of a communication system (Col. 2, Lines 45 and 46).

As to claims 6 and 7, the instant application's disclosed prior art teaches a plurality of receiving quality detection means 102, which provide error detection information corresponding to each subband filter 100 (Pg. 2, Par. 3) and a signal representing this number of error bits in receiving is the receiving control signal S23. One of ordinary skill in the art would clearly recognize that the error rate measurement

as recited in the claim is a type of error detection information in which is well known in the art (i.e. bit error rate or BER).

Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the instant application's disclosed prior art and Grubb et al, further in view of Ejzak (US 6,389,066).

As to claims 8 and 15, the instant application's disclosed prior art and Grubb teach all the subject matters claimed above, except for the first transmitting/receiving apparatus comprises a modulation means for applying a modulation according to the characteristics of a transmission. Ejzak, in the same field of endeavor, teaches a first transmitting/receiving apparatus (Fig. 3, means 25) comprising a modulation means for applying a modulation according to the characteristics of a transmission way (Fig. 3, means 100, 76, 78, 90, and 60). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Ejzak with the instant application's disclosed prior art and Grubb in order to provide higher data throughput for a communications system (Col. 1, Line 42).

As to claims 9, 10, 16, and 17, the instant application's disclosed prior art teaches a transmitter generates applies a spread spectrum signal to a transmitted signal and carries out transmission and demodulating means 101 in the receiving section (Pg. 1, Par. 1; Pg. 2, Par. 2).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Boyden (US 6,724,737) see Col. 2, Lines 47-58; Heath et al (US 2002/0080735) see Fig. 2.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freshteh N. Aghdam whose telephone number is (571) 272-6037. The examiner can normally be reached on Monday through Friday 9:00-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Freshteh Aghdam

August 15, 2005

KEVIN BURD
PRIMARY EXAMINER